News

AMERICAN MANAGEMENT ASSOCIATION

1996 AMA Survey

Workplace Drug Testing and Drug Abuse Policies

Summary of Key Findings

DRUG TESTING

The share of major U.S. firms that test for drugs rose to 81% in January 19% from 78% in January 1995, bringing workplace testing to its highest level since AMA's initial survey in 1987. Since 1987, drug testing in major U.S. organizations has increased by 277 percent:

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Test for drugs (%)	21.5	36.5	48.0	51.5	63.0	73.3	77.9	76.4	77.7	81.1
Increase from previous year (%)		68.8	51.5	7.3	22.3	16.3	6.3	(1.9)	1.7	4.4
Increase from January 1987 (%)		68.8	123.3	139.5	193.0	240.9	2$2.3	255.3	261.3	277.2

The rate of increase from 1987 to 1992 was due to various factors, among them

- o Department of Transportation (DOT) and Department of Defense (DOD) regulations which, with local and state legislation mandated testing in certain job categories;
- o The practical effects of the Drug Free Workplace Act of 1988;
- o Court decisions that recognize an employer's right to test both employees and job applicants in the private Sector:
- o Action by insurance earners to reduce accident liability and control health care costs; and
- o Corporate requirements that vendors and contractors certify that theirs is a drug-free workplace.

In the absence of additional federal initiatives since 1992, the share of major U.S. companies that perform any sort of drug testing has remained relatively steady; the year-to-year differences from 1993 to 1996 are within the margins of error for each years' samples. However, DOT regulations promulgatcd in 1994 increased the number of employees in many firms that are subject to random or periodic drug tests.

Business category is the most important determinant in corporate drug testing. Manufacturers (89%) lead the service sector (73%). Within the service sector, l00% of transportation firms test; they are most affected by DOT regulations. Elsewhere, testing is pcrformed by 79% of Wholesalers and retailers, 77% of general service providers, 60% of business service providers. and 56% of financial service providers.

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2.

The question 'Shall we test?" has been answered (and answered in the affirmative) by most surveyed companies. Over half of the companies that test have been doing so for five years or more; only 3% are inaugurating testing programs in 1996. Key policy decisions today gather, around the more detailed questions of "Whom shall wc test, for what reasons, and how *often?'* Policy reviews have led 18 respondent firms (1.9% of the sample) to discontinue some elements of their testing programs, and six (0.6%) have eliminated testing entirely.

TESTING CURRENT EMPLOYEES

Employee testing has grown at a slightly greater rate than testing overall

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Test employees (%)	163	26.9	36.1	37.7	51.9	61.9	66.3	65.1	67.8	70.3
Increase from previous year (%)		65.0	34.2	4.4	37.7	19.3	7.1	(1.8)	4.1	3.7
Increase from January 1987 (%)		65.0	121.5	1313	218.4	279.8	306.7	299.4	315.9	331.2

The reported decrease from 1993 to 1994 and subsequent increases to 1996 are within the margins of error for each year's sample and do not indicate statistically valid year-to-year changes.

Employee testing occurs 'for cause," which includes testing on reasonable suspicion of drug use and testing after accidents; or it occurs on a periodic or random basis where probable cause is not a factor. Periodic testing ensures that all covered employees will be tested over a given period of time; random testing allows that a percentage of covered employees will be tested over a given period if they are among those selected at random. Periodic or random testing which grew at dramatic rates in the period 1990-92, has levelled:

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Periodic/random testing(%)	2.5	4.2	5.2	103	203	27.8	33.0	28.7	32.6	33.7
Inrease from previous year (%)		68.8	23.8	98.1	97.1	36.9	18.7	(13.0)	13.6	3.4
Increase from January 1987 (%)		68.8	108.5	312.0	712.0	1012.0	1220.0	1048.0	1204.0	1248.0

As above, the year-by-year variations from 1992 to 19% arc within the margins of error for each year's samples; we see no important growth in the share of companies that perform random or periodic tests since 1992. Moreover, we see evidenee that, company by company, a lesser percentage of covered employees are being tested annually. In 1993, an average of 41% of covered employees were tested annually: in 1996 the average was 34%. New DOT regulations made a greater number of employees subject to testing in 1994, and the average number of employees tesed increased accordingly (see below); but the whole number represents a lesser percentage of covered job categories.

Two-thirds of firms that perform periodic or random testing do so under government mandate (54%). Transportation companies lead in periodic/random testing (67%), followed in the private sector by wholesalers and retailers (38%) and by manufacturers (34%), whose transporters may fall under the same regulations.

Employee Test-Positive Rates: The test-positive rate, which fell steadily from 1989 to 1992 and then levelled, fell again in 1994:

	1989	1990	1991	1992	1993	1994	1995
Respondent firms:	168	484	464	291	333	462	420
Employees tested:	54,072	76,296	127,043	150,020	96,414	221,602	196,540
Positive results:	4,364	3,220	3,388	3,781	2,417	4,263	3,757
Test-positive rate:	8.1%	4.2%	2.7%	2.5%	2.5%	1.9%	1.9%

The determining factor in the fall of test-positive rates from 1989 to 1992 was an increase in the testing pool caused by the concurrent growth of periodic and random testing programs. As morc employees are tested for reasons other than suspicion of use. the test-positive ratio falls. When the growth in periodic or random programs ended in 1992 so did the decline in test-positive rates. In 1994, new DOT regulations brought an **increase** in the number of employees subject to such testing (although not in the share of companies performing such tests); with that increase, the test-positive rate fell again, but, absent any new regulations in 1995, the rate remained constant. These points, together with better testing procedures (see below), is. the explanation for the lower rate which the data best supports. The lower rate from 1993 to 1994 does not confirm an actual decline in employee drug use.

However, another finding does give indication of lesser use. In companies that test only for cause variations in the test-positive rate cannot be explained by policy shifts in periodic or random testing programs. In 1993, such companies reported a test-positive rate of 11.1%, in 1994, the rate fell to 8.1%; in 1995, to 7.9%.

Actiomn Test-Positive Employees: Thirty-six percent of respondent firms that test employees (25% of all respondent firms) dismiss test-positive employees, some immediately, some as a last resort after counselling and disciplinary actions have been tried. Of firms that test employees:

- o 22% dismiss test-positives immediately (identical to 1995);
- 0 14% dismiss test-positives as a "last resort" (15% in 1995);
- o 63% refer test-positives for counseling and treatment (64% in 1995);
- o 21% enforce a suspension, probation, or other disciplinary action (identical to 1995);
- o 2% ***reassign*** test-positives to other duties (3% in 1995).

Other Workplace Initiatives: Other anti-drug programs have grown in tandem with drug testing but the data indicates that education and awareness programs for employees and supervisory training to spot behavior that indicates possible drug abuse have been victims of recent cost-cutting in some organization

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Education/awareness programs	21%	NA	25%	35%	49%	52%	57%	50%	47%	44%
Supervisory training	26%	NA	29%	36%	50%	56%	57%	54%	48%	52%
Employee assistance programs	33%	NA	42%	51%	64%	68%	78%	73%	75%	76%

If cost-cutting is, the rationale for elimination of such programs, the decision may prove penny-wise but pound foolish. The data gives strong indication that education, training, and assistance for treatment and counselling have a definite deterrent effect on employee drug use. Companies that combine testing programs with one or more anti-drug initiatives insistently report test-positive rates lower than companies that rely on testing alone:

	Test-Positive Rates (Employees)					
	1989	1990	1991	1992	1993	1994
Combine testing and programs	4.6%	4.0%	2.6%	2.5%	205%	1.9%
Test, but offer no programs	10.2%	5.7%	4.1%	3.4%	3.8%	2.8%

Drug testing is rarely a standalone policy in combatting drug use by employees:

- o 64% combine employee testing with other programs;
- o 6% test employees but sponsor no programs;
- o 21% ***sponsor*** one or more programs, but do not test employees; and
- o 9% neither test nor sponsor any programs.

4.

TESTING NEW HIRES

A majority of respondent firms test all ncw hires for drugs in pre-employment physical examinations:

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Test all new hires (%)	15.5	24.3	333	33.6	47.5	56.5	64.9	60.7	63.2	67.7
Test selected new hires (%)	3.9	3.6	5.3	9.2	6.9	7.9	8.6	8.2	7.4	8.9
Total testing new hires (%)	19.4	27.9	38.6	42.8	54.4	64.4	73.5	68.9	70.6	76.6

The variations from 1993 through 1995 are within the margins of error each year's sample and indicate neither an increase nor decrease in new hire testing the 1996 figure represents a true rise, albeit a small one, over 1994 levels. In total, recent findings confirm an end to the annual growth rate that was a highlight in previous years.

Although the AMA sample is not a statistically accurate model of all American businesses (see page 8), the data indicates that approximately one-third of all U.S. new hires in 1995 will undergo a drug test. Drug tests are rarely given as part of the application process per se: testing occurs when applicants have a job offer in hand, pending the results of a pre-employment physical examination that incluedes a drug test.

Where new hire testing is selective rather than universal, the selection criteria is most often the new hire's job function or category (72% of those that test selectively, 8% of all that test new hires). Other, lesser used selection criteria include management level and previous indication of drug use.

New Hire Test-Positive Rates: The trend is similar to that for current employees (see above): dramatic rate decreases from 1989 to 1992, then a comparative leveling:

	1989	1990	1991	1992	1993	1994	1995
Respondent firms:	313	717	631	380	455	624	628
Employees tested:	64,533	131,054	164,430	170,263	97,143	523,658	528,920
Positive results:	7,343	7,558	7,533	7,230	4,197	19,673	20,931
Test-positive rate:	11.4%	5.8%	4.6%	4.3%	4.3%	3.8%	4.0%

From 1989 to 1992 the annual decline in new hire test-positive rates coincided with the increase in universal new hire testing and thus an ever-increasing testing pool, which in itself would tend to drive the rate downward Reiterating the findings for test-positive rates among employees, the identical new hire rates in 1992 and 1993 matched the identity of testing policies in those years.

Why the lower test-positive rate for new hires in 1994 and 1995?

- o More hiring and thus more testing of people in higher age brackets and at higher salary levels, where drug use is less frequent.
- o Greater awareness of pre-employment testing prompting those in a job search to "stay clean"

Manufacturers reported the highest new hire test-positive rates (4.7%), followed by wholesalers and retailers (4,4%); these two groups traditionally lead in this area. The lowest rates were reported by providers of financial services (1.3%). Other groups: transportation (2.8%), business and professional services (2.6%), and general services (2.5%). Public-sector employers found a 4.5% test-positive rate for new hires. rate of 4.5%, fallowed by manufacturers (4.2%), general services (2.7%), and transportation (2.6%),

Action on Test-Positive New Hires: Ninety-four percent of firms that test new hires will not hire **test-positive** applicants. Four percent allow for other options, including a re-test after a waiting period

METHODOLOGY AND VALIDATION POLICIES

Urinalysis continues to be the favored method of medical drug testing:

- o 92% use urine sampling and 79% use no other method but that
- o 15% use blood sampling and 0.8% use no other method;
- o 2% use hair sampling, and 0.5% use no other method.
- o 2% use non-medical performance testing and 0.2% use no other method.

Metabolics of illegal substances remain in the urine for various time periods after use: cocaine for approximately 72 hours, marijuana for three weeks or more. Proponents of hair sampling claim it extends the time line for detectable residues to several months. Performance testing seeks to confirm that the test subject is capable of performing job tasks at the time those tasks are to be performed, its proponents cite its non-invasive performance-based nature.

Validation PoIicies: The usual and recommended procedure for urine sampling calls for a first-screen immunoassay test, with positive samples then re-tested by the more sophisticated (and more expensive) gas-chromatography method. First-screen immunoassay tests identify chemical combinations that mayor may not be controlled or illegal substances; gas-chromatography testing is more specific and more comprehensive. Despite these well-known parameters, validation policies remain inconsistent:

- o 67% re-test the sample with a more rigorous testing procedure (as recommended):
- o 19% repeat the initial procedure on the same sample;
- o 8% take and test a new sample and
- o 6% perform no validation at all.

Medical Review: Three-quarters (76%) of firms that test report the utilization of a medical review officer (MRO), an increase from 48% in 1994. An MRO analyzes test findings, judges them against the test subject's medical profile, and renders a verdict to the employer; the employer does not see the test result, but rather the MRO's report. Medical review of test results offers significant protection to employees who may test positive due to the use of prescription drugs or non-controlled substances that register as controlled substances on both the immunoassay and gas~chromatography tests.

The use of a medical review office correlates to lower test-positive rates for employees, not only for the whole sample, but also where testing policies align:

	Test-Positive Rates (Employees)	
	Use MRO	Do Not Use MRO
All respondents	1.9%	4.6%
Support other anti-drug initiatives	1.9%	4.4%
Support no anti-drug initiatives	1.7%	9.0%

These findings suggest that a medical review office lowers test-positive rates by re-examining positive test results which may be explained by the test subject's use of prescription drugs, over-the-counter drugs, or simple foodstuffs (a typical example is poppy seeds). Strictly speaking, these are not "false positives;" they are true positives that have a legitimate medical explanation. The increase in MRO utilization may explain in large part the Iower test-positive rate among employees tested in 1994 and 1995.

6.

COST AND COST FACTORS

The cost of a testing program is a function of testing policies, which determines the number of people tested. The average cost of testing in 1995 was $50,161; more informative are the cost ranges, which show that 62 percent of respondents that test spent less than $10,000 on drug testing in 1995:

		Total employed by organization			
	whole Sample	Under 500	500-2,499	2,499-9,999	10,000 or more
Less than $10,000		**86%**	**69%**	**36%**	**30%**
$10,000 to $19,999	17%	**9%**	**20%**	**23%**	**9%**
$20,000 to $49,999	10%	**3%**	**9%**	**22%**	**13%**
$50,000 to $99,999	4%	**0%**	**1%**	**7%**	**11%**
$100,000 or more	7%	**1%**	**1%**	**12%**	**37%**
Average 1995 cost	$50,161	$8,065	$11,712	$60,637	$281,093

The average cost per testee was $35, a figure affected by validation policies (and thus by the number of first-screen test-positives requiring validation) and by testing methods (blood and hair sampling tend to be more expensive than urine sampling). Obviously, periodic and random testing programs, which increase the testing pool, also increase expenditures; on average, firms with periodic or random testing programs experienced an average cost ten times higher than chose firms that test ***only*** for cause, or only new hires.

Cost Justification: Aggregate spending in 1995 on drug testing among the 452 respondents giving numbers totalled $22,672,900; a fair estimate of total spending in 1995 by all AMA-member companies would approach a quarter of a billion dollars. BUt, as the above averages show, drug testing does not represent a major corporate expenditure in most individual firms. For that reason, only 83% have performed a cost-justification study of their testing programs. The more that is Spent, the more likely such a study: 29% of firms spending $1OO,O00 or more have performed a cost-justification study.

Of the 18 surveyed firms that have discontinued a previous drug testing program, 7 said that the program "was not cost cffective."

Health and Liability Insurance: Monies are expended on testing, education and counselling in the expectation of long-term savings which may be realized in lesser absenteeism and lateness, fewer on-the-job accidents, or avoiding the expense of recruiting and training replacement workers when drug abusers are terminated. Savings may also come in the form of reduced insurance claims for both health care and liability.

Ninety-five percent of respondent firms reported that their employer-provided health insurance covers drug abuse treatment. Of companies that test for drugs, 96% carry such coverage, compared with 87% of non-testing firms.

Vendor Requirements: Twenty-two percent of respondent firms require vendors ***and*** contractors to certify that theirs is a drug-free workplace. Such certification if it follows the design of the Federal Drug-Free Workplace Act, requires neither employee nor new hire testing but it does require drug education programs and participation in an EAP for counselling and treatment.

Large oompanies are far more likely to insist on vendor certification than small ones; 42% of organizations employing 1O,000 or ***more people*** report vendor certification policies, compared with 11% of firms employing fewer than 500 ***people.*** Forty-five percentt of public sector respondents report such a policy, compared with 21% of private-sector firms;

IS TESTING EFFECTIVE?

As drug testing has become a normative policy, human resources managers in organizations that practice it have become convinced of its worth. In 1987, 50% of respondents with testing programs answered “yes" to the query, "Do you think that drug testing is an effective way to deal with workplace drug abuse?" By 1996, that number had jumped to 83%. Among firms that practice periodic or random testing, 94% answered “yes in 1996. Moreover, snore than half (54%) of the rcspondents in companies that do no testing answered "yes."

What does "effective" mean? There is no doubt that testing is an effective method of identifying drug users, so long as the **chain** of specimen control is assured and proper validation methods, including medical review, arc employed; this in spite of human ***ingenuity*** that perpetually seeks new ways to avoid or confound testing procedures. Hair sampling has extended the period that testing can cover between the use of a drug and its discovery via testing. In the future snore sophisticated technology may permit a closer analysis of the degree of use, and thus differentiate (as testing today does not) between occasional and habitual use.

Nevertheless, no finding of AMA's nine-year survey efforts east confirm with statistical certainty that testing deters drug use. Declines in test-positive rates maybe attributed to an increasing testing pool; when policies are consistent from year to year, so are employee test-positive rates. To the question of deterrent effect, the data gives no answer.

Few companies that test for drugs keep data that records its effects. This year, for the first time, we asked if companies that test had statistical evidence that their testing programs had any of these results:

	Yes	No	No Answer
Lesser absenteeism or illness	4.7%	79.6%	15.7%
Fewer disability claims	6.1%	78.7%	15.2%
Lower accident rates	9.3%	75.8%	14.9%
Fewer incidents of employee theft	1.9%	82.0%	16.1%
Fewer incidents of employee violence	2.5%	81.5%	15.9%

The data does support, most ernphatically, the deterrent effect of drug education and awareness programs, supervisory training and employee assistance programs (see page 3 above). Testing cannot and should not be expected to take the place of good supervision and management practices.

The American Management Association has consistently advised that:

- o Organizations comply with both legislative and regulatory requirements;
- o Testing and drug abuse policies be drawn with the participation and advice of legal counsel;
- o Testing procedures follow guidelines originally promulgated by the National Institute on Drug Abuse (NIDA), since subsumed into the U.S. Department of Health and Human Services; and
- o Actions regarding employee discipline be performance-based.

Drug testing where utilized, ought to be part of a comprehensive policy on workplace drug abuse that includes education supervisory training and opportunities for counseling and treatment. Survey findings continue to indicate that most AMA-member companies that practice drug testing are so doing properly, economically, and effectively.

ABOUT THIS SURVEY

The American Management Association's tenth annual survey questionnaire on workplace testing was mailed in January 1996 to human resources managers in AMA-member companies. We received 961 usable responses to form the database for the present study.

The current sample accurately represents AMA's corporate membership of 95,00 U.S. organizations, which in total employ a quarter of the American workforce. It is not a statistically accurate sampling of all U.S. businesses, 95% of which gross less than $1O million annually and/or employ fewer than 5O people.

The database is not identical year to year that is, the AMA workplace testing survey is not a longitudinal study. Moreover, AMA's corporate membership base is not static. In order to allow statistically valid year-to-year comparisons, previous years' findings have from time to time been recalculated to match the current model more accurately. The 1996 sample has a 3.5% margin of error; larger samples in earlier years had margins of error of up to 2.5%. The AMA samples for the past three years:

Business Category	1994	1995	1996
Manufacturing	48.1%	50.3%	49.2%
General Services	25.2%	23.8%	25.8%
Finance, Insurance, Real Estate	7.2%	7.0%	8.3%
Business and Professional Services	6.9%	5.6%	5.7%
Wholesale and Retail Trade	6.4%	4.5%	4.9%
Transportation	3.0%	2.1%	2.2%
Public Administration	3.2%	3.0%	2.1%
Unclassified and Unclassifiable	0.0%	3.7%	1.8%

Annual Sales (or budget, if nonprofit)	1994	1995	1996
Less than $10 million	8.1%	7.5%	6.3%
$10 to $49.9 million	24.8%	18.9%	18.4%
$50 to $249 million	24.8%	28.8%	27.0%
$250 to $499 million	9.6%	9.6%	11.2%
$500 million or more	19.1%	27.3%	27.6%
Not Reported	8.3%	8.0%	9.5%

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